Bryan W. Shaw, Ph.D., P.E., *Chairman*Toby Baker, *Commissioner*Jon Niermann, *Commissioner*Richard A. Hyde, P.E., *Executive Director*





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 1, 2017

CERTIFIED MAIL

U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202 Attention: Evelyn Rosborough (6WQ-CA)

SEP 0 5 201

Re: Draft TPDES Permit No. WQ0004350000 (TXS000901)

Dear Ms. Rosborough:

Enclosed is the draft permit and Fact Sheet and Executive Director's Preliminary Decision for TPDES Permit No. WQ0004350000 as required under the TCEQ/EPA Memorandum of Agreement. Please review the documents and provide any written comments, objections (general or interim) or recommendations with respect to the draft permit within 45 days from receipt of this draft permit.

City of Fort Worth

If you need additional information or have any questions, please call Hanne L. Nielsen at (512) 239-6524, or contact the permit writer via e-mail at hanne.nielsen@tceq.texas.gov. Also, the Wastewater Permitting Section fax number is (512) 239-4430. When submitting written correspondence, include MC-148 in the letterhead address following my name. Thank you for your cooperation in this matter.

Sincerely,

Rebecca L. Villalba, Team Leader Stormwater & Pretreatment Team

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Wastewater Permitting Section (MC-148)

Water Quality Division

RLV/hln

Enclosures

ATTACHMENT 1

X Minor

Major

<u>EPA - REGION 6</u> <u>NPDES PERMIT CERTIFICATION CHECKLIST</u>

In accordance with the MOA established between the State of Texas and the United States Environmental Protection Agency, Region 6, the Texas Commission on Environmental Quality submits the following draft Texas Pollutant Discharge Elimination System (TPDES) permit for Agency review.

Private Domestic Non-POTW

 \mathbf{X}

Facility Name SIC Code		City of Fort Worth M	[S4					
		9111	, , , , , , , , , , , , , , , , , , , ,					
Туре	of operation	MS4 Phase I						
NPDES Permit No.		TXS000901	TPDES Permit No.	WQ0004350	VQ0004350000			
Segment No.		0806, 0807, 0808, Basin Trinity Riv 0809, 0826, 0828, 0829, 0830, 0841		Trinity River	er Basin			
Rece	iving Water	Below Eagle Mounta	ver Below Lake Worth, Lake in Reservoir, Eagle Mountain Trinity River Below Benbro nity River	n Reservoir, Grape	vine l	Lake,	Lake	
Pern	nit Action:	New						
		Renewal WITH cha	inges					
	_	x Renewal w/out char	nges (permit and WQS)					
		Amendment/Modifi	ication, proceed directly to ques	tion 22, below				
	4 6 11 3							
Answ	er the following.				Yes	No	N/A	
1.	Are there know	wn or potential interstate	water issues associated with thi		163	X	IVA	
2.	Is there known or potential third-party interest/environmental concern regarding this permit action?					X		
3.	Does this facility discharge to a 303(d) listed waterbody segment?				X			
	If YES, does t 303(d) listing?		of the pollutant(s) of concern io	lentified in the	,,,			
4.	Is this permit consistent with the approved WQMP?				X			
5.	Does the facility discharge to a waterbody segment which has a finalized TMDL?							
	If YES, does the permit implement the TMDL consistent with the WLAs?							
6.	Does the fact sheet document the rationale for the inclusion/omission of permit condition for each 303(d) listed pollutant of concern or TMDL pollutant?						and the second s	
7.	Has a priority watershed of critical concern been identified by the U. S. Fish and Wildlife Service for this segment?					X		
8.	Does this permit authorize ammonia discharges > 4.0 mg/l at the edge of the mixing zone?					X		

9.	Does this permit require testing for Whole Effluent Toxicity in accordance with the state's standard practices and implementation plan?		T
10.	If this facility has completed and implemented a Toxicity Reduction Evaluation (TRE), has any subsequent toxicity been identified?		X
11.	Does this permit propose to grant a variance request (WQS, FDF, etc.) or does it incorporate a proposed or final approval of a variance request?		•
12.	If a POTW is ≥ 5 MGD, does it have an approved Pretreatment Program?		X
13.	Since the last permit issuance, has the POTW had a new Pretreatment Program approved or a Pretreatment Program modification approved?		X
14.	Does this permit contain authorization for wet weather related peak-flow discharges?	X	-
15.	Does this permit include a bypasses of any treatment unit or authorize overflows in the system?		
16.	Does this permit include provisions for effluent trading?		
17.	Does this permit contain specific issues on which EPA and the state are not in agreement regarding the permitting approach?		,
18.	Is this facility subject to a national effluent limitations guideline?	X	
19.	Please specify: Does this permit contain "first-time" implementation of a new federal guideline, policy,	x	
	regulation, etc.?		
	Please specify:		
20.	Is this a new facility or an expansion of an existing facility?		
	For an EXISTING facility, if any limits have been removed or are less stringent than those in the previous permit, is it in accordance with the anti-backsliding regulations?		X
21.	Does this permit incorporate any exceptions to the standards or regulations?		
22.	If this is a permit modification/amendment?		X
	Please specify:		

Name:

Hanne L. Nielsen

Date:

August 28, 2017

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT RENEWAL FOR A MUNICIPAL SEPARATE STORM SEWER SYSTEM

PROPOSED PERMIT NO. WQooo4350000

APPLICATION AND PRELIMINARY DECISION. City of Fort Worth, 1000 Throckmorton Street, Fort Worth, TX, 76102 and Tarrant Regional Water District, P.O. Box 4508, Fort Worth, TX 76164 which operate the Fort Worth Municipal Separate Storm Sewer System (MS4) have applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004350000 to authorize stormwater point source discharges to surface water in the state from the Fort Worth MS4. TCEQ received this application on February 1, 2016. Texas Department of Transportation (TxDOT) — Fort Worth District, will not continue as a co-permittee in the renewal of TPDES Permit No. WQ0004350000. TxDOT is currently operating under its own TxDOT state-wide individual permit, TPDES Permit No. WQ0005011000, which was issued on November 30, 2016.

The MS4 is located within the corporate boundary of the City of Fort Worth, in Tarrant, Denton, Parker, Wise and Johnson Counties, Texas 76101-76124, 76126, 76127, 76129-76137, 76140, 76147, 76148, 76150, 76155, 76161-76164, 76166, 76177, 76179-76182, 76185, 76191-76193, 76195-76199, and 76244. Discharge is via the MS4 to various ditches and tributaries that eventually reach the West Fork Trinity River Below Lake Worth, Lake Worth, West Fork Trinity River Below Eagle Mountain Reservoir, Grapevine Lake, Lake Arlington, Clear Fork Trinity River Below Benbrook Lake, Benbrook Lake, and Lower West Fork Trinity River, Segment Nos. 0806, 0807, 0808, 0809, 0826, 0828, 0829, 0830, and 0841 of the Trinity River Basin. The unclassified receiving waters have a presumed aquatic life use of high for perennial streams, limited for intermittent streams with perennial pools, and minimal aquatic life use for intermittent streams. The designated uses for Segment Nos. 0806, 0807, 0808, 0809, 0826, 0828, 0829 and 0830 are: primary contact recreation, high aquatic life uses and public water supply. The designated uses for Segment No. 0841 are primary contact recreation and intermediate aquatic life use.

The TCEQ Executive Director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, Executive Director's preliminary decision, and draft permit are available for viewing and copying at City Hall Annex, 908 Monroe St, Fort Worth, Tarrant County, Texas, 76102.

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or

request a public meeting about this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. TCEQ holds a public meeting if the Executive Director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. Unless the application is directly referred for a contested case hearing, the response to comments will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application. If comments are received, the mailing will also provide instructions for requesting a contested case hearing or reconsideration of the Executive Director's decision. A contested case hearing is a legal proceeding similar to a civil trial in a state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name; address, phone number; applicant's name and permit number; the location and distance of your property/activities relative to the facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period and, the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are germane to the group's purpose.

Following the close of all applicable comment and request periods, the Executive Director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.

EXECUTIVE DIRECTOR ACTION. The Executive Director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the Executive Director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the Executive Director's decision, you will be added to the mailing list for this

specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be placed on: (1) the permanent mailing list for a specific applicant name and permit number; (2) the mailing list for a specific county; or (3) the permanent mailing list for a specific applicant name and permit number and the mailing list for a specific county. If you wish to be placed on the permanent or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at www.tceq.texas.gov/about/comments.html within 30 days from the date of newspaper publication of this notice.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. Public comments and requests must be submitted either electronically at www.tceq.texas.gov/about/comments.html, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Any personal information you submit to the TCEQ will become part of the agency records; this includes email addresses. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, Toll Free, at 1-800-687-4040 or visit their website at www.tceq.texas.gov/goto/pep. Si desea información en español, puede llamar al 1-800-687-4040. General information about the TCEQ can be found at our web site at www.tceq.texas.gov.

Further information may also be obtained from City of Fort Worth at the address stated above or by calling Cody Whittenburg at (817) 392-5455.

Issuance Dat	:e	

For draft Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004350000 (EPA I.D. No. TXS000901) for the Municipal Separate Storm Sewer System (MS4) to discharge to surface water in the state.

ISSUING OFFICE:

Texas Commission on Environmental Quality (TCEQ) P.O. Box 13087 Austin, Texas 78711-3087

APPLICANTS:

City of Fort Worth 1000 Throckmorton Street Fort Worth, TX, 76164

Tarrant Regional Water District P.O. Box 4508 Fort Worth, TX 76164

PREPARED BY:

Hanne L. Nielsen Wastewater Permitting Section (MC-148) Water Quality Division (512) 239-6524

DATE: November 28, 2016

PERMIT ACTION: Renewal without changes

I. EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. It is proposed the permit be issued to expire five years from the date of issuance, following the requirements of 30 Texas Administrative Code (TAC) §305.71(a).

II. APPLICANT ACTIVITY

The applicants currently operate the Fort Worth MS4.

Texas Department of Transportation (TxDOT) – Fort Worth District, will not continue as a co-permittee in the renewal of TPDES Permit No. WQ0004350000. TxDOT– Fort Worth District is currently operating under TPDES Permit No. WQ0005011000 issued on November 30, 2016.

I. DISCHARGE LOCATION

As authorized by the Clean Water Act (CWA) § 402(p), this permit is proposed on a system-wide basis. This permit covers all areas, except for any agricultural lands, within the right-of-way of the City of Fort Worth served by or otherwise contributing to discharges from MS4s owned or operated by the applicants listed above. As described in the application, the MS4 is located within the corporate boundary of the City of Forth Worth in Tarrant, Denton, Johnson, Parker, and Wise Counties, Texas 76101-76124, 76126, 76127, 76129-76137, 76140, 76147, 76148, 76150, 76155, 76161-76164, 76166, 76177, 76179-76182, 76185, 76191-76193, 76195-76199, and 76244. Discharge is via the MS4 to various ditches and tributaries that eventually reach West Fork Trinity River Below Lake Worth, Lake Worth, West Fork Trinity River Below Eagle Mountain Reservoir, Eagle Mountain Reservoir, Grapevine Lake, Lake Arlington, Clear Fork Trinity River Below Benbrook Lake, Benbrook Lake, and Lower West Fork Trinity River in Segment Numbers 0806, 0807, 0808, 0809, 0826, 0828, 0829, 0830, and 0841 of the Trinity River Basin.

II. RECEIVING STREAM USES

The unclassified receiving waters have a presumed minimum aquatic life use of high for perennial streams, limited aquatic life use for intermittent streams with perennial pools, and minimal aquatic life use for intermittent streams. The designated uses for Segment Nos. 0806, 0807, 0808, 0809, 0826, 0828, 0829, and 0830 are: primary contact recreation, high aquatic lif use and public water supply. The designated uses for Segment No. 0841 are: primary contact recreation and intermediate aquatic life use.

III. STREAM STANDARDS

The general criteria and numerical criteria which make up the stream standards are provided in 30 TAC §§ 307.1 - 307.10.

VI. DISCHARGE DESCRIPTION

A. Discharges Authorized

- 1. The draft permit authorizes the discharge of stormwater from all existing or new stormwater point sources to surface water in the state from the MS4 owned or operated by the permittees, except that the following discharges, whether discharged separately or commingled with municipal stormwater, are not authorized by the permit:
 - a. non-stormwater; any stormwater discharges associated with industrial activity; or other stormwater discharges that require a TPDES permit from the TCEQ; and
 - b. discharges of materials resulting from a spill, except when necessary to prevent loss of life, personal injury, or severe property damage (provisional discharge authorization does not extend to parties responsible for the spill nor relieve the responsible parties of any statutory or regulatory requirements or liability for the spill).

- 2. Subsections 1.a and 1.b do not negate any person's ability to assert the *force majeure* (Act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7. The permit does not transfer liability for the act of discharging without, or in violation of, a National Pollutant Discharge Elimination System (NPDES) or a TPDES permit from the parties responsible for the discharge to the permittees.
- 3. As part of the application, the applicants included detailed information on programs they have implemented in order to address these discharges as required in the existing TPDES permit.

B. Stormwater Management Program (SWMP)

The applicants have submitted a SWMP with the application to address the requirements of the existing TPDES permit.

A combined SWMP for this MS4 can better reflect differences in topography, historical development patterns, receiving water qualities, legal authorities, and other individual abilities of the co-permittees. The combination of these separate SWMPs is consistent with federal and TPDES requirements.

The draft permit authorizes discharges to surface water in the state in accordance with the Texas Water Code (TWC) §26.027. Consistent with the federal stormwater regulations in 40 CFR §122.26(a) and adopted by reference in 30 TAC §281.25, the TCEQ requires that the SWMP be implemented to address all portions of the MS4 with discharges that reach waters of the United States (U.S.). Waters of the U.S. do not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA. This exclusion applies only to manmade bodies of water that neither were originally created in waters of the U.S. (such as disposal areas in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland.

The Executive Director's review of the permit application and attached SWMP indicates that all programs were implemented according to the permit requirements. The Executive Director determined that if the SWMP is implemented as detailed in the application, it will reduce the discharge of pollutants from the MS4. The Executive Director proposed additional conditions to better ensure that pollutants continue to be reduced to the Maximum Extent Practicable (MEP) (see Part VII, Section A. and F. of this fact sheet).

Specific SWMP requirements are contained in the following minimum control measures (MCM):

- 1. MCM 1, MS4 Maintenance Activities.
 - a. Structural Controls. The existing permit requires that the permittees operate the MS4 and any stormwater structural controls associated with the MS4 in a manner to reduce the discharge of pollutants to the MEP.
 - i. The City of Fort Worth (City) has a storm drain inlet cleaning and maintenance program to remove pollutants before they reach receiving

waters. Street Services utilizes two, two-man, vactor crews to clean storm drainage structures. Vactor trucks are highly specialized trucks that utilize high-pressure water hoses and a vacuum system. There are an estimated 30,000 curb inlets and drop boxes in Fort Worth and the vactor crews clean approximately 7% of these annually (10 per day, 200 working days per year). These crews work a routine schedule but also respond to complaints from citizens, neighborhood associations, and others. The City purchased additional vactor trucks so that five crews can be deployed. Street Services also has three emergency trucks with two-man crews that are utilized in the event of storm drain system clogs, collapses, or other emergency needs.

- b. Floatables. The existing permit requires the permittees to reduce the discharge of floatables, such as litter and other human-generated solid refuse, into the MS4.
 - i. The City's Parks and Recreation Department has multiple "Adopt A Spot" programs, where civic groups are encouraged to sponsor regular litter clean-ups in City parks, medians, and other locations where litter accumulates. The Fort Worth Code Compliance Department's Solid Waste Division (SWD) is responsible for citywide trash, garbage, solid waste collection, and a household paper, plastics, and metals recycling program as well as organizing volunteer activities such as the Cowtown Great American Cleanup. SWD conducts and enforces illegal dumping investigations and assures that outdoor accumulations of trash, debris, and garbage are cleaned up. All of these activities reduce the discharge of floatables (litter and other human generated solid waste). Data regarding actual amounts of litter removed with these programs are included in the Annual Reports. Significant amounts of trash are prevented from entering the City's creeks and ponds or other waters of the U.S. through these efforts.
 - ii. The Tarrant Regional Water District (TRWD) annually sponsors Trinity River Awareness Day; an educational event focusing on activities the public can perform to improve water quality in the Trinity River watershed. Part of this event involves a river clean up where individual volunteers and volunteer groups are encouraged to remove litter from several sites along the river within Fort Worth. During the last event, 15,000 volunteers removed 17,760 pounds of trash from the river.
 - TRWD also sponsors an annual Eagle Mountain Lake Area Cleanup. Eagle Mountain Lake is a reservoir on the West Fork of the Trinity River with portions of the lake within Fort Worth's corporate boundaries. During the last event, 285 volunteers removed approximately 4,360 pounds of trash.
- c. Roadways. The existing permit requires the permittees to operate and maintain public streets, roads, and highways in a manner to minimize the discharge of pollutants, including pollutants related to deicing or sanding activities.

- i. The City has an active spill response program that addresses hazardous and non-hazardous spills to roads and streets. See item 3 below.
- ii. The City has a street sweeping program that includes routine sweeping and clean-up after deicing. A private contractor cleans approximately 140 blocks of the downtown area on a weekly basis to remove litter and pollutants associated with streets.
- iii. After winter storms, street sweeping is used to remove deicing materials. During snow or icy weather, the Street Services Division places aggregate on bridges, overpasses, and selected streets to improve traction. If the aggregate is dry, no salt is added. However, if the aggregate is wet, a 1:29 (3.5%) ratio of salt is added to prevent the aggregate from freezing to the truck. To minimize pollutant discharges to the MS4, the aggregate is swept up after the storms have passed and then recycled whenever possible. The remaining dirt and salt is landfilled.
- 2. MCM 2, Post-Construction Stormwater Control Measures.
 - a. The existing permit requires the permittees to continue the implementation and enforcement of the controls to minimize the discharge of pollutants, after construction is completed, from areas of new development and significant redevelopment that disturb one acre or more of land, including projects less than one acre that are part of a larger common plan of development or sale.
 - i. The City incorporates a wide variety of components into policy, planning, development, and implementation. The planning process and regulation of new development and redevelopment are outlined in the Fort Worth Comprehensive Plan, the Development Procedures Manual, as well as through the Subdivision Ordinance, Comprehensive Zoning Ordinance, Tree Ordinance, and Floodplain Ordinance.
 - Through the Subdivision Ordinance, the City of Fort Worth has adopted the Stormwater Management Design Manual consisting of the Local Criteria section and the 2006 edition of the North Central Texas Council of Government (NCTCOG) regional stormwater quality manual (iSWM). This manual was established to guide the community in drainage policy and criteria so that new development does not increase flooding, erosion, and water pollution problems. The policies and standards contained within this manual apply to all development and redevelopment projects associated with platting activities and modifications to public infrastructure.
 - ii. Regional Perspectives on New Development: Since the City is part of a larger urban area sharing major watersheds, the City is actively involved in regional discussions of water quality issues related to new development through the NCTCOG.
 - iii. In the Dallas-Fort Worth metropolitan area, municipalities share a

common urban area and many of these cities are currently under the TPDES stormwater regulations. The City of Fort Worth worked at the regional level through NCTCOG in developing a template for designing water quality management programs for new development and significant redevelopment within the region. The template was drafted with participation from the other six (6) Phase I cities, builders and developers. The City of Fort Worth program, designed using this template, was submitted to the EPA and was accepted as satisfying the City's Implementation and Compliance Schedule for "Developing planning procedures to address water quality concerns to incorporate into existing comprehensive plan" due on or before February 1, 2000. In 2006, the City of Fort Worth adopted the iSWM which emphasized stronger development review and stormwater quality standards. The City is in the process of adopting the 2010 update of the iSWM along with improved control of non-plat development through a Fill and Grading Permit.

- iv. The City of Fort Worth adopted a stormwater utility in July 2006 to provide stable funding for its stormwater management program. Developed properties are charged monthly fees based primarily on the amount of impervious cover that is on a parcel of property. Payers who voluntarily use stormwater management techniques or best management practices (BMPs) to offset the impacts of their property on stormwater runoff can be granted credits. Individual properties can be eligible for multiple credits up to a maximum total credit of 40%. Credits are granted for a number of practices including but not limited to water quality treatment, inlet trash collection, active education programs, and channel protection detention.
- b. The existing permit requires the permittees to evaluate the existing SWMP as necessary to ensure that the program includes a regulatory mechanism, such as an ordinance, to implement and enforce requirements of this program and ensure that the SWMP includes strategies for structural and non-structural controls (i.e., BMPs) appropriate for the community. The permit also requires each permittee to provide for adequate long-term operation and maintenance of BMPs.
 - i. Currently, all development and redevelopment projects in the City of Fort Worth are required to adhere to the established documents, manuals, policies, rules and ordinances applicable to all development and redevelopment projects associated with platting activities and modifications to public infrastructure. The primary mechanism regulating post-construction stormwater controls in the City of Fort Worth is the Stormwater Management Design Manual (Design Manual). This manual has been adopted via ordinance to implement structural and nonstructural controls for the community.
 - ii. In June 2012, the City of Fort Worth adopted a Grading Ordinance which controls grading activities for all projects that disturb 0.5 acres or more of land. This ordinance also includes the adoption of the 2010 revision of the

NCTCOG iSWM manual and updated local criteria manual to increase the level of protection of the City of Fort Worth's stormwater infrastructure. The manual adopts the explicit standards for construction runoff control and requires an integrated process for construction and post-construction controls.

- iii. The City of Fort Worth is continually evaluating current and upcoming changes in local ordinance, policies, and procedures to ensure the requirements of the permit are adequately addressed.
- c. The existing permit requires the permittees to assess the impacts on the receiving water(s) for all flood control projects. Where feasible, new flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater. If applicable, the retrofitting of existing structural flood control devices to provide additional pollutant removal from stormwater shall be implemented to the MEP.
 - i. In order to assure that proposed flood control projects assess the impacts on the water quality of receiving water bodies, the City of Fort Worth performs a project design review of all future, major flood control projects. The project design review utilizes criteria contained in the City of Fort Design Manual. While this program element is not focused on providing comprehensive water quality management, water quality considerations are included in the design process. Discharge rates for the 2-year and 10-year event are analyzed in accordance with the Design Manual for both flood control projects as well as new development. The goal is to assure that project impacts to receiving water quality are assessed and minimized through the use of sound engineering design principles. Where possible, water quality treatment principles are incorporated into the design of flood control projects.
 - ii. The plans for all construction projects on any TRWD land owned or controlled by fee ownership or easement on the Fort Worth Floodway are reviewed by district staff for erosion control measures prior to permit issuance. TRWD has developed a pamphlet that details set of the criteria for construction that occurs within its jurisdictional area of the Fort Worth Floodway. These criteria are to be used as a supplement to the U.S. Army Corps of Engineers, Fort Worth District (CESWF) Pamphlet SWFP 1150-2-1. Part of the criteria considers Stormwater Collection Devices on all new, relocated or renovated storm drain systems. These devices should consider the capability of containing trash, sediment and oils in accordance with the guidelines set forth in the integrated iSWM program developed by NCTCOG.
 - iii. During the first permit term the City of Fort Worth and TRWD did two separate studies to address the feasibility of converting existing flood control sump areas into detention/retention ponds for pollutant removal. The studies showed that none of eleven structures, studied by the City, were good candiates for retrofitting and that retrofits were not practical for

any of 29 flood control sump areas, studied by TRWD, along the Clear Fork and West Fork of the Trinity River.

In 2012, a consultant was retained to provide peer review of flood control projects as an additional means of identifying and evaluating feasible water quality options. There are several ongoing flood control projects with initiatives with water quality benefits. The status of these is submitted with the annual report.

In 2015, a consultant was contracted to prepare a new Floodplain Management Plan. The draft plan was released for review September 28, 2015. The City of Fort Worth and TRWD will work together to evaluate options for updating the development comprehensive plan.

- 3. MCM 3, Illicit Discharge Detection and Elimination.
 - a. The existing permit requires the permittees to prohibit illicit non-stormwater discharges from entering the MS4 and to develop a program, with a schedule, to detect and eliminate illicit discharges and improper disposal into the MS4. The program must include: 1) a description of the program and inspections to prevent illicit discharges; 2) procedures for on-going field screening activities; 3) procedures for investigating portions of the MS4 with a reasonable potential of containing illicit discharges or other sources of non-stormwater; 4) procedures to prevent, contain, and respond to spills; 5) facilitation of public reporting of illicit discharges; 6) educational and public information activities to facilitate the proper management of used oil and toxic materials; and 7) controls to limit infiltration of seepage from municipal sanitary sewers into the MS4.
 - i. TRWD meets this requirement by having a General Ordinance in place that prohibits untreated sanitary sewer discharges into its reservoirs and within the jurisdictional area of the District. Employees perform inspections of District properties and illicit discharges are reported to District offices where appropriate personnel are assigned to investigate and mitigate the discharge.
 - ii. The ordinance gives the district enforcement power to eliminate discharges and improper disposal. Illicit discharges are most often identified through public complaints reported to District offices. TRWD Environmental inspectors perform investigations and repond to water quality complaints. Although TRWD has enforcement authority, it typically notifies other appropriate agencies, such as City of Fort Worth and TCEQ.
 - iii. The City of Fort Worth passed a comprehensive environmental ordinance in 1995 and has amended the ordinance as necessary since that time. Enforcement of this ordinance is primarily the responsibility of Environmental Management Division (EMD) personnel involved in MS4 screening and monitoring activities, inspection of construction sites and industrial facilities, spill response, and other investigations. A broad

variety of enforcement options are available should a violation of the code be observed and can be found in Chapter §12.5-302 of the City Code.

- b. The existing permit requires the permittees to identify all categories of miscellaneous, non-stormwater discharges that may be discharged into the MS4, and any other individual non-stormwater source that could contribute significant amounts of pollutants to the MS4, and include a description of any local controls or conditions placed on discharges exempted from the prohibition on non-stormwater.
 - i. Non-stormwater discharges that are allowed into the MS4 are listed in the Environmental Protection and Compliance Chapter of the City Code. The Environmental Code was formally adopted by the City Council on November 28, 1995 and continues to be updated as necessary. Chapter §12.5, Article III, Stormwater Protection, describes what constitutes a stormwater violation and what enforcement actions can be taken and can be found online at <a href="http://library.amlegal.com/nxt/gateway.dll/Texas/ftworth_tx/cityoffortworthexascodeofordinances?f=templates\$fn=default.htm\$3.0\$vid=amlegal:fortworth_tx.

USEPA made this code available as a model ordinance for use by other cities by publishing it on their national Web Page. A list of 17 prohibited non-stormwater discharges can be found in Chapter §12.5-302 of the City Code.

- c. Elimination of Illicit Discharges and Improper Disposal. The existing permit requires the operator of an illicit discharge or improper disposal practice to eliminate the illicit discharge or stop the improper disposal practice as quickly as reasonably possible. If the elimination of an illicit discharge within 30 days is not possible, the permittees shall require the operator of the illicit discharge to remove the discharge according to an expeditious schedule. Until the illicit discharge or improper disposal is eliminated, the permittees shall require the operator of the illicit discharge or improper disposal to take all reasonable measures to minimize the discharge of pollutants to the MS4.
 - i. As mentioned above City of Fort Worth has an environmental ordinance, which is primarily enforced by the EMD personnel involved in MS4 screening and monitoring activities, inspection of construction sites and industrial facilities, spill response, and other investigations
- d. Overflows and Infiltration. The existing permit requires the permittees to implement controls where necessary and feasible to prevent dry weather and wet weather overflows from sanitary sewers into the MS4. The permittees are required to continue to limit the infiltration of seepage from municipal sanitary sewers into the MS4.
 - i. City of Fort Worth's Water Department has two major programs to limit seepage and overflows of sanitary sewage from entering the MS4. One

program is an ongoing effort to maintain and repair defective portions of the sanitary sewer system, and to eliminate stoppages in the system as soon as possible after they occur. A second program involves implementation of a systematic inflow/infiltration (I/I) reduction effort.

The Field Operations Division of the Fort Worth Water Department has wastewater collection system operations and a maintenance program that combines preventive and scheduled maintenance, corrective (emergency) repairs, aggressive cleaning and replacement.

Preventive and scheduled maintenance activities include internal televised inspection of problem lines, identification and repair of offset joints, cracks, manholes, etc. These repairs are generally completed within 30 days of their identification. The Division also developed a scheduled walkout program to follow basin mains, identifying, and correcting defects as they find them. A monthly helicopter flight also identifies defects. The Division has identified and plugged all known storm drain and sanitary sewer bypass connections. An aggressive program eliminates root growth in sanitary sewers (through chemical application), which ultimately decreases the size and number of cracks.

- ii. Corrective (emergency) repairs are those involving major collapse of a line. The Division's goal is to complete these repairs within three (3) days.
- iii. Replacement of sewer lines includes both trenchless and open cut methodologies and is effected through capitalized projects. Approximately \$5 million is budgeted each year for such work and is dedicated to replacements (not new lines or major collection mains, which are funded through capital improvement funds). The replacements are prioritized based upon the degree of failure of the lines.
- iv. TRWD's General Ordinance prohibits untreated sanitary sewer discharges into TRWD's reservoirs and within the jurisdictional area of the District. Employees perform inspections of District properties and illicit discharges are reported to District offices where appropriate personnel are assigned to investigate and mitigate the discharge.
- e. Household Hazardous Waste and Used Motor Vehicle Fluids. The existing permit prohibits the discharge or disposal of used motor vehicle fluids and household hazardous wastes, and the intentional disposal of collected quantities of grass clippings, leaf litter, and animal wastes into the MS4. The permit requires the implementation of programs to collect used motor vehicle fluids for recycling, reuse, or proper disposal and to collect household hazardous waste materials for recycling, reuse, or proper disposal.
 - i. The City's environmental ordinance prohibits discharge/dumping of materials such as grass clippings, leaf litter, and animal wastes into storm sewers (e.g. sweeping collected grass clippings into a curb inlet or dumping bags of collected leaves into a drainage channel). However, it is not the

intent of the ordinance to prohibit natural occurrences (e.g. leaves that fall from trees into storm drainage channels or grass clippings left as mulch that are inadvertently washed into a storm drain during a rain event).

- The City of Fort Worth operates a permanent household hazardous waste collection center, known as the Environmental Collection Center (ECC). Residents can bring a variety of wastes to the center for disposal, free of charge. The center accepts all types of automotive fluids, batteries, and household chemicals; fluorescent lights; pesticides; herbicides; paint; and most types of hazardous materials. Materials not accepted at the center include: ammunition, medical waste, explosives, radioactive materials, electronics, gas cylinders, and tires. Understanding that many citizens either cannot, or will not, travel to the center; the City also sponsors numerous mobile collections where employees go into the neighborhoods for one-day collection events. In addition to the ECC, the City has three free drop-off stations open to Fort Worth homeowners and renters. Dropoff stations may be used for disposal of trash and recyclables, as well as old tires (limit four per household every six months), furniture, minor remodeling debris, brush and yard trimmings, home computers, and electronics and other bulky items such as appliances and televisions.
- f. MS4 Screening and Illicit Discharge Inspections. The existing permit requires the permittees to continue implementation of a Dry Weather Screening Program that includes follow-up activities to eliminate illicit discharges and improper disposals. Follow-up activities may be prioritized on the basis of magnitude and the nature of the suspected discharge, sensitivity of the receiving water, or other relevant factors. The entire MS4, but not necessarily each individual outfall, should be screened at least once every five years.
 - i. City of Fort Worth has an ongoing Dry Weather Field Screening program that tests all known major outfalls in the city a minimum of once every five (5) years. Investigators perform trace-back and other follow-up investigations in response to any suspected illicit discharge. For a detailed describtion of The Dry Weather Field Screen program, see item 8 below.
- g. NPDES and TPDES Permittee List. The existing permit requires the permittees to maintain an updated list of dischargers that discharge directly to the MS4 and that have been issued an NPDES or TPDES permit. The list shall include the name, location, and permit number (if known) of the discharger.
 - i. The City has developed a databases to track permitted construction sites and industrial facilities. The databases were initially populated using information from the EPA Region 6 NOI database. These lists are updated regularly with information obtained from the TCEQ Central Registry and Water Quality General Permits search tool and information gathered by City staff in the course of construction site and industrial facility inspections. Section 12.5-333 of the City's Environmental Code requires that all facilities required to operate under a NPDES or TPDES general permit must send a copy of their NOI to the City.

- h. MS4 Map. The existing permit requires the permittees to maintain a current, accurate MS4 map of the location of all MS4 outfalls; the names and locations of all waters of the U.S. that receive discharges from the outfalls; and any additional information needed by the permittees to implement their SWMP. Where possible, the permittee are required to use the Global Positioning System (GPS) to locate outfalls and photographs for documenting baseline conditions. The permittees are required to document the source information used to develop the MS4 map, including how the outfalls are verified and how the map will be regularly updated.
 - i. All MS4 assets have been mapped from schematics (drawings and plans) and have been field verified. Field survey was completed in 2013. Waters of the U.S. are encompassed in the National Hydrography Dataset (NHD) as maintained by the United States Geological Survey (USGS). Currently, stormwater infrastructure data are maintained by the Transportation and Public Works Stormwater Management Division. MS4 assets are mapped in any newly developed areas, annexations, or redevelopments.
- i. Spill Prevention and Response. The existing permit requires the permittees to implement existing programs which prevent, contain, and respond to spills that may discharge into the MS4.
 - i. Spill Prevention is addressed by the Fort Worth Fire Department's (FWFD) Fire Prevention Bureau. The City of Fort Worth has two primary programs to address spills that may impact the MS4. The FWFD has a HazMat Squad to address major incidents and the Environmental Management Department has a response team to address minor incidents.
 - ii. The firemen routinely inspect each business and institution in their areas for fire hazards, outdated fire extinguishers and improperly stored hazardous materials. When hazards are identified, the responsible party is given a specified amount of time to correct the violation. Officers with the FWFD Fire Prevention Bureau also inspect institutions, business, and industries concentrating on areas where hazardous materials are kept including aboveground/underground storage tanks. Complaints are also investigated. Hazmat squads are stationed in several locations in the city and responds to any hazardous material incidents.
 - iii. TRWD will explore good housekeeping practices at all District owned facilities. Pollution prevention measures will be evaluated at District owned operations facilities and locations where materials may be stockpiled. Necessary improvements will be made to reduce pollutant load from facilities owned by TRWD. Annual training for operations employees will be implemented to make them aware of pollution prevention practices in the field and at maintenance facilities.
- 4. MCM 4, Pollution Prevention and Good Housekeeping for Municipal Operations.
 - a. Pollution Prevention and Good Housekeeping program. The existing permit

requires the permittees to implement a pollution prevention and good housekeeping program for municipal operations. The program must ensure that waste removed from the MS4 or other municipal operations is properly disposed of.

- i. City of Fort Worth meets this program requirement by using their Urban Sub Watershed Restoration Manual, Municipal Pollution Prevention/Good House Keeping Practices, published by the Center for Watershed Protection; training materials developed by the NCTCOG; and other resources to evaluate pollution prevention potential of existing procedures, implement new good housekeeping measures and BMPs where needed, and develop targeted training programs for all employees responsible for municipal operations subject to this MCM.
- ii. Street maintenance practices and street sweeping practices are described in MCM 1.
- iii. Discharge of pollutants from road repair disturbing an area of one acre or greater or a common plan of development that is an acre or greater will be controlled through BMPs established as part of the required construction permitting (TXR150000). For road repair disturbing less than an acre and for routing maintenance activities that do not require permitting, guidelines will be established to reduce the discharge of pollutants to the MEP. For equipment yards, material storage facilities, and maintenance facilities, site specific BMP manuals may be established to aid in reducing pollutant discharge.
- iv. The City maintains a contract for recycling of used oil and other fluids collected as a result of equipment maintenance activities. Contracts are also held with waste disposal contractors for proper disposal of wastes including but not limited to, hazardous, non-hazardous, special, and solid wastes; a variety of lights including high pressure sodium high-intensity discharge (HID) lamps, incandescent bulbs, fluorescent lamps and tubes, vapor lamps, and metal halide HID lamps; light ballasts which may contain polychlorinated biphenyls (PCBs); electronic waste; U.S. Department of Agriculture (USDA) regulated garbage; and biohazardous materials. Personnel from EMD oversee these waste disposal activities and ensure that wastes are properly stored to prevent discharge of pollutants prior to collection and disposal.
- b. Pesticide, Herbicide, and Fertilizer Application. The existing permit requires the permittees to continue to implement controls to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers, by the permittees' employees or contractors, to public rights-of-way, parks, or other municipal property. The permittees, if they have jurisdiction over lands they do not directly own (e.g. incorporated city), shall implement programs to reduce the discharge of pollutants related to the commercial application and distribution of pesticides, herbicides, and fertilizers on those lands.

- i. Currently, City staff from the Parks and Community Services Department applies pesticides, herbicides, and fertilizers on City owned property. In addition, the Transportation and Public Works Department has a herbicide-spraying program to minimize vegetative growth in storm drainage channels. Selected ditches are sprayed once to twice per year. Plants such as cattails and young willow trees are specifically targeted, as they are especially disruptive to the flow of stormwater. To prevent contamination of these storm drains, only products that are EPA approved for application in and around waterways (e.g. Roundup) are used. The main cause of pesticide/herbicide/fertilizer problems in waterways concerns proper use and disposal of the products. To assure that these products are used correctly, City staff and contractors must all be properly licensed by the State of Texas Structural Pest Control Board to participate in any spraying program.
- c. List of Municipal Facilities. The existing permit requires the SWMP to include a list of all municipal operations subject to the municipal operation, maintenance, and training programs listed under this MCM and all municipally owned and operated industrial activities subject to TPDES or NPDES industrial stormwater regulations.
 - i. City of Fort Worth meets this program requirement by maining a list of all City owned or leased properties. The list serves as a basis for establishing a list of municipal facilities subject to the other components of this MCM. The list is maintained in Microsoft Excell or Access format and may include tracking mechanisms for training, waster disposal, and other program elements.
- 5. MCM 5, Industrial and High Risk Runoff.
 - a. The existing permit requires the permittees to continue to improve their existing programs to identify and control pollutants in stormwater discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g., transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal, and recovery facilities; facilities that are subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge that the permittees determine to be contributing a substantial pollutant loading to the MS4.
 - i. The City of Fort Worth has an established Industrial and High Risk Runoff program to identify and evaluate facilities that have a higher potential to negatively impact stormwater quality. A majority of the facilities identified in are governed by the monitoring, reporting, and inspection requirements of their own TPDES or NPDES stormwater permits.
 - Industrial facilities that the City of Fort Worth determines to be contributing a substantial pollutant load to the MS4 are identified through

monitoring, complaint investigations, or historical data. Facilities required to obtain permit coverage under the TCEQ's Multi-Sector General Permit (MSGP), or other applicable permit for industrial discharges, are required to comply with all inspection, monitoring, and reporting schedules as required by the permit. Additionally, all industries that are required by their TPDES industrial stormwater permit to conduct benchmark monitoring are required to submit the results of this monitoring to the City of Fort Worth. Any of these facility types that are not regulated by a TPDES or NPDES permit but that are determined to be contributing a substantial pollutant load to the MS4 may also be required to conduct inspections, monitor discharges, install BMPs, or establish a stormwater pollution prevention plan as determined necessary by the City of Fort Worth.

- b. The program must include priorities and procedures for inspections and establishing and implementing control measures for industrial and high risk discharges, and an Industrial and High Risk Monitoring Program as described in Part III, Section B.2.h.iii. of the permit.
 - i. Facilities addressed under this MCM are inspected at least once during the five-year permit term. Priorities for future inspections are established for a facility based on a number of factors including but not limited to, complaints received, facilities operating outside the requirements set forth in their TPDES permit, facilities identified as operating without a permit, violations where exposure of contaminates are or have affected human health or serious impact to the environment, a facility being noted as contributing a substantial pollutant load to the MS4, or other deviations or violations are noted. Inspection frequency will be adjusted to encourage compliance and to encourage the facility to eliminate any noted discharges to the MS4.
- 6. MCM 6, Construction Site Stormwater Runoff.
 - a. The existing permit requires the permittees to continue to implement a program to reduce the discharge of pollutants into the MS4 from construction sites that are one or more acre in size, or less than one acre if part of a common plan of development. The program must include an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law.
 - i. The City of Code of Fort Worth prohibits discharges of pollutants into the MS4 from all sources, including construction sites. EMD has two full time inspectors who enforce this MCM through section §12.5-334 of the City Code.
 - b. The program must also include requirements to: 1) use and maintain erosion and sediment control BMPs; 2) control site waste, such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste; 3) inspect construction sites and identify priorities for inspecting sites and

enforcing control measures that consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; 4) provide training to construction site operators including notifying them of their potential responsibilities under the TPDES permitting regulations; 5) perform site plan reviews to ensure plans incorporate potential water quality impacts; 6) receive and consider information from the public; and 7) maintain structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites to the MS4.

- i. City of Fort Worth's Standard Construction Specifications require site operators to address the control of site waste such as discharded building materials, concrete truck washout water, chemicals, litter and sanitary waste at the construction site.
- City of Fort Woth has on average, approximately 375 active construction operations in Fort Worth at any give time and EMD's full time inspectors perform inspection of these sites. The inspectors visit each site, on average, once per month for routine inspections of BMPs and compliance with the TPDES Construction General Permit (CGP) and inspect sites more often as needed when corrective actions are required. The inspectors maintain records on site conditions observed during the inspections and keep files for all violations noted. Through ordinances adopted by the City of Fort Worth, construction sites in the city are required to perform construction activities in accordance with applicable TPDES permits. Requirements regarding the use and maintenance of control measures during construction are clearly addressed in the TPDES CGP. Additionally, it is an enforceable offense to introduce any discharge to the MS4 that is not composed entirely of stormwater or allowable non-stormwater discharges. This applies to all construction sites whether or not regulated by a TPDES discharge permit. Therefore, discharges such as silt and sediments from construction sites are not allowed to enter the storm drain system. When illicit discharges occur, City inspectors take appropriate enforcement actions specifying the amount of time for the site to make corrections.
- iii. Site plans are reviewed through the development process for conformance with the 2015 version of the NCTCOG iSWM Manual. SWPPPs are evaluated by City construction stormwater inspectors during the inspection process discussed in this MCM. In 2012, Fort Worth adopted a grading ordinance, § 12.5-876, requiring a grading permit for most land disturbances greater than 0.5 acres and conformity with the latest iSWM manual.
- iv. EMD inspectors are a part of the City's plan review process and are made aware of all projects that qualify under TPDES requirements. Inspectors visit these sites when construction activities commence to ensure the TPDES/NPDES regulations are being followed. Inspectors often have the opportunity to visit with the site operators before construction activities at pre-development conferences. These conferences are held for most major projects so the owners/operators can be made aware of all local, state, and

federal building requirements. The inspectors hand out a variety of written materials ranging from a one-page document meant to familiarize the operator with the TPDES process to large manuals that detail a multitude of BMP options. Examples of these written materials are on file at EMD and are available for review at the division's offices on the 7th floor of the City Hall Annex, located at 908 Monroe Street.

- v. The City of Fort Worth has a number of avenues to receive information submitted by the public including concerns related to construction sites. When a call or email is received directly or through the environmental hotline, an inspector is notified and evaluates the concern within one business day. If requested, the inspector will follow-up with the caller to relay the findings and next steps (if any are necessary).
- vi. The City of Fort Worth participated with the cities of Dallas, Arlington. Irving, Garland, Mesquite, and Plano in assisting the NCTCOG in designing an NPDES Construction Inspection Training Program. The final program consists of a one (1) day workshop. All aspects of the TPDES program are stressed including SWPPP development, BMP selection, site inspections and NOI or Notice of Termination (NOT) filing. This course is designed for use by municipal inspectors, site owner/operators and general construction site personnel and offered through NCTCOG. All EMD construction site inspectors are required to take this course. In addition, the City has held similar workshops for City employees from all departments associated with construction activities. The City's TPDES construction inspectors give educational programs to organizations as requested. These programs are designed to familiarize the site operators with NPDES/TPDES and local regulations. EMD also has a simple brochure that explains the basic requirements and illustrates a few example BMPs. These brochures are typically given out at these seminars in addition to other literature as available. Additional educational information on construction stormwater management is also available through the City of Fort Worth's website.
- c. List of Sites. The existing permit requires the permittees to maintain a current list of construction sites that discharge directly to the MS4 and that have been issued an NPDES or TPDES permit. The list must include the permittee name, location, and permit number for discharges that have been authorized under an NPDES or TPDES stormwater permit for construction activities (if known).
 - i. The City of Fort Worth maintains a database containing a list of operators and construction sites that are located within the city limits. This database contains the name, location, and permit number issued by TCEQ that authorizes stormwater discharges from construction activities.
- d. Contractors. The existing permit requires the permittees to require construction site contractors to implement appropriate erosion and sediment control BMPs and control waste (for example, discarded building materials,

concrete truck washout water, chemicals, litter, and sanitary waste) at the construction site, that may cause adverse impacts to water quality.

- i. This task has been performed by City of Fort Worth staff since the program's inception. This has been accomplished via ordinance that requires operators of construction sites to have a NPDES or TPDES permit to discharge stormwater. Additionally, ordinance requires these facilities to operate in strict compliance with the requirements of its NPDES or TPDES permit. These permits require operators to have appropriate erosion and sediment control BMPs
- 7. MCM 7, Public Education, Outreach, Involvement and Participation.
 - a. Public Education and Outreach. The existing permit requires the permittees to document and ensure that the SWMP promotes, publicizes, and facilitates public education and outreach to residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel and provide justification for any group that is not addressed by the program. The permittees are required to document the activities conducted and materials used to fulfill the program element and to provide enough detail to demonstrate the amount of educational and outreach resources and materials used to address each group.
 - i. The public education program coordinator or appropriate EMD staff coordinates the compilation of records of outreach by city staff including quantities of literature and promotional items distributed, records of media contacts, public speaking engagements, events and meetings attended, etc., that reach residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.
 - b. The existing permit requires the permittees to continue to implement a public education and outreach program component to promote, publicize, and facilitate the: 1) public reporting of illicit discharges or improper disposal of materials, including floatables into the MS4; 2) proper management and disposal of used oil and household hazardous wastes; and 3) proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators and distributors.
 - i. City of Fort Worth has a number of avenues to receive information submitted by the public. The city has a Environmental Hotline, where an inspector is notified and evaluates the concern. Violations can also be reported through the city's website.
 - ii. Community Engagement Liaisons present programs and updates to groups and associations about water quality topics such as litter as a stormwater quality component, and household hazardous waste.
 - iii. The city of Fort Worth actively participates in city-driven and partner-

driven anti-litter campaigns. One recently-introduced message is "Keep in Clean. Trash in the Can. Not the Creek."

- iv. For a number of years curb marking was used to discourage dumping into storm drain inlets. Curb inlet markers have evolved to contain unique identifiers and contact information to aid in reporting of illicit discharges and improper disposal into the MS4. Those marking continue to exist as an avenue of educational awareness.
- v. EMDs website contains link to regional, state, and federal resources for information about a illicit discharges and waste into the MS4. The website also contains information devoted to construction site operators and business about the TPDES permitting process, inspections, etc.
- vi. Inspectors distrubute informational litterature and items on an as-needed or requested basis to businesses and industries through personal contacts and at meetings and conferences.
- vii. As described under MCM 3, the city of Fort Worth collects hazardous household waste and used vehicle fluids at its Environmental Collection Center. The city also has a mobile collection program where waste is collected from residents in Fort Worth and from more than fifty other government entities.
- viii. Home and landscape pollution topics, tips, and features are frequently promoted in both internal and external print and online city communications publications. Informational literature and items promoting proper use and disposal are distributed by Community Engagement Liaisons at events and meetings in around the city.
- c. Public Involvement and Participation. The existing permit requires the permittees to develop and implement a public involvement and participation program that complies with state, tribal, and local public notice requirements. The program element must include opportunities for a wide variety of constituents within the MS4 area to participate in the SWMP development and implementation.
 - City of Fort Worth has its SWMP available online at http://fortworthtexas.gov/env/stormwaterquality/swmp/ and at EMD offices on the 7th floor of the City Hall Annex at 908 Monroe Street. Residents and businesses can ask questions and comment on the SWMP using an email address provided.
 - ii. EMD staff members currently serve on boards or are members of several committees of NCTCOG's Regional Stormwater Management Program; including the Regional Stormwater Management Program Coordinating Council, Illicit Discharge Determination and Elimination Task Force, the Pollution Prevention Task Force, and the Stormwater Public Education Task Force. Other staff members serve on various committees on regional

and state levels.

- iii. The Fort Worth Chamber of Commerce and Downtown Fort Worth, Inc. both have a number of boards and committees consisting of business personnel through which outreach and advice regarding stormwater quality can be achieved. The Fort Worth Business Assistance Center (BAC), a division of the Economic Development Department of the City of Fort Worth, provides information and resources for small business owners about city ordinances and requirements. The Community Engagement Office, which is part of the City Manager's Office, regularly meets with homeowner and neighborhood associations and other civic groups in all sectors of the city to provide information and education and return feedback to city departments on issues of concern
- TRWD has three 24-hour telephone numbers for complaints. These numbers are published in homeowners' newsletters and on all District Western Division publications. TRWD makes bacteria data collected on the Trinity River publicly available on its web page. TRWD currently collects E. coli data at eleven locations on a routine basis. TRWD provides resources and access to schools for programs like Major Rivers and WaterWise. TRWD is an active member in Fort Worth Independent School District programs such as Waterama and Adopt-A-School. TRWD staff currently visit schools and community groups to conduct guest lectures and presentations. The water district's education initiatives has produced interactive community kiosks and student workbooks featuring topics like water conservation, water quality, and recycling water through wetlands. Several regional cleanups are held annually to gather litter from watersheds and spread information on water pollution prevention. TRWD also offers a program for community groups and businesses to cleanup sections of the Trinity River, called Adopt-A-River. TRWD speaks at meetings for the non-profit Save Eagle Mountain Lake, Inc. and acts as a technical advisor.
- 8. MCM 8, Monitoring, Evaluating, and Reporting. The existing permit requires the permittees to continue to implement the following monitoring or screening programs: (a) dry weather screening; (b) wet weather screening; and (c) industrial and high risk runoff monitoring. In addition, the existing permit requires comprehensive storm event discharge monitoring (which may include a Wet Weather Characterization Sampling Program) as well as floatables monitoring.
 - a. Dry Weather Screening Program. This program requires the permittees to continue their efforts to detect the presence of illicit connections and improper discharges to the MS4. All areas of the MS4 must be screened at least once during the permit term. The permittees may utilize modified screening methods based on experience gained during previous field screening activities.
 - i. The objectives of this program are to continue ongoing efforts to detect the presence of illicit discharges and assess dry weather water quality changes. Analyses performed include air and water temperature, pH, color,

turbidity, copper, ammonia, phenols, chlorine, specific conductivity, and detergents. Observational characteristics including odor, oil sheen, surface scum, sewage, and flow are noted. A colorimetric meter that measures pollutants in parts per million is used for the analysis of copper, phenols, ammonia and chlorine. The methylene blue active substances (MBAS) method is used for detergent analysis. Portable meters are used to measure pH, specific conductivity, and turbidity. Tests and observations are performed twice in a 24-hour period, separated by a minimum of four hours, to increase the potential to detect illicit flows. Also, sampling and analyses are only conducted when there has been no significant precipitation (less than 0.10 inch) within 48 hours. Priorities for follow-up screening of outfalls rely on a number of factors such as past history of illicit discharges, number of citizen complaints, potential pollutant sources, and experience of field staff, etc.

- ii. When screening results indicate the possible presence of illicit flow field staff begin a trace back investigation of the pollutants of concern within the MS4. A variety of investigative tools, such as additional dry weather fieldscreenings, watershed reconnaissance, video camera in the storm drain lines, dye tracing, and tunnel entries, etc., may be used in follow-up activities as appropriate for each situation. If a responsible party is found, appropriate enforcement actions are taken.
- b. Wet Weather Screening Program. This program requires the permittees to identify, investigate, and address areas within their jurisdiction that may be contributing excessive levels of pollutants to the MS4. The MS4 must be screened as specified in the SWMP, and sampling and non-sampling techniques to be used for current screenings and follow-up screenings must be specified.
 - The purpose of the Wet Weather Screening Program is to address areas that may be contributing excess levels of pollutants to the MS4 during storm events. Each year, at least 50 runoff samples are collected and analyzed. Locations are selected based on past or previous history, information gathered during dry weather field screens, or other field reconnaissance, industrial monitoring data, information obtained from industrial or construction inspections, or other program emphases. Samples may be collected in-stream, from outfalls, curbs, open ditches, pipes, sheet flow, or other appropriate locations. Sample locations may be clustered within small sub-watersheds to thoroughly characterize the runoff and isolate areas of particular concern, or may be individual locations scattered throughout the City. Samples are collected from runoff resulting from a rain event that is greater than 0.10 inch in magnitude and that occurs at least 72 hours after the last measurable rain event. The greater than 0.10 inch rainfall guideline may be waived during drought conditions. Sample analyses consist of, at a minimum, pH, specific conductivity, and turbidity. Additional analyses which may be performed include, but are not limited to ammonia-nitrogen, nitrate-nitrogen, phosphate, chromium, copper, zinc, COD, total coliform, and E. coli

bacteria. The selection of additional analyses to be performed will be determined by senior personnel on a case-by-case basis based upon land use and potential pollutants present in the sampling area. The data will be reviewed to determine what follow-up activities, if any, should be conducted.

- c. Industrial and High Risk Runoff Monitoring Program. This program requires the permittees to include monitoring for pollutants in stormwater discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g., transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal, and recovery facilities; facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge that the permittees determines to be contributing a substantial pollutant loading to the MS4. The requirements for this program are as listed below.
 - A) The Industrial and High Risk Runoff Monitoring Program must include the collection of quantitative data on parameters that have been identified by the permittees as a pollutant of concern for that facility and must coincide with corresponding industrial sector-specific requirements of the TPDES Multi-Sector General Permit No. TXR050000 (MSGP) or any applicable general permit issued after September 29, 1995, which is not contingent on whether a particular facility is actually covered by an applicable general permit, or must coincide with monitoring requirement in any individual permit for stormwater discharges for the facility.
 - B) To avoid the duplication of efforts, the permittees may review data collected by a facility as required by any individual or general permit for that facility rather than performing additional sample collection and analysis.
 - C) In lieu of the monitoring discussed above, the permittees may accept a certification from a facility that raw and waste materials, final and intermediate products, by-products, material handling equipment or activities, industrial machinery or operations, or significant materials from past industrial activity are not presently exposed to stormwater and are not expected to be exposed to stormwater for the certification period. Where a permittee accepts a "no exposure" certification, the permittee is required to conduct site inspections of the facility not less than once per permit term to verify the "no exposure" exemption. The permittees may waive this inspection for those facilities that participate in the TCEQ's Small Business and Local Government Assistance Compliance Commitment (C2) Program.
 - D) The permittees may also waive monitoring requirements under the existing permit for facilities that hey determines are in compliance with the TPDES Multi-Sector General Permit No. TXR050000.
 - i. To satisfy this permit requirement, the City requires industries with benchmark monitoring requirements under the MSGP for stormwater discharges related to industrial activity to submit their monitoring

results to the City. Each year the City sends notices to all facilities on file with a benchmark monitoring requirement, reminding them of their reporting requirement to TCEQ and requesting that a copy of the report be sent to EMD.

d. Wet Weather Characterization Sampling Program. The permittees participate in a Wet Weather Characterization Program through a regional effort coordinated by the NCTCOG. From 1997-2001 the permittee conducted land use monitoring of stormwater outfalls within the MS4. For the current permit term, as well as the upcoming permit term, the permittees are working in conjunction with other regional participants on an instream monitoring program to more accurately assess the effects of urban runoff on city streams and establish baseline data on the receiving streams to use in determining the long term trends associated with stormwater runoff. The TCEQ, by letter dated April 15, 2003, approved the original NCTCOG monitoring program.

In this application, the permittees have requested approval to conduct sampling in accordance with a revised Regional Wet Weather Characterization Program (RWWCP). Specific changes to the original approved RWWCP were proposed by the NCTCOG by email dated October 11, 2016 and subsequent revisions on May 26, 2017, June 8, 2017, and June 12, 2017. TCEQ approved an updated NCTCOG RWWCP Proposal for the Fourth Permit Term by letter dated June 30, 2017. The approved RWWCP includes certain revisions, and is described in Part VII.B.1.a. of this fact sheet.

TCEQ supports the participation of the permittees in the RWWCP. However, if the permittees choose instead to perform Wet Weather Characterization Sampling according to the Representative Storm Event Monitoring option in lieu of the RWWCP option then the permittees must conduct outfall monitoring at the four outfalls specified in the permit.

- e. Floatables Monitoring. The existing permit requires the permittees to implement a floatables program as described in Part IV, Section B. of the permit.
 - i. TRWD has established and maintains two floatables collection devices on the Clear Fork Trinity River. The floatable debris collectors were established in 2006 at two separate locations. Two collectors were installed across from the Clear Fork Pump Station under Rosedale Street. These collectors use the assistance of a boom to direct floatables towards the units for collection. A second set of two collectors was installed at the outfall of sump #19 where all water entering the main river must pass through the unit. The collectors consist of large structured nets that trap floating debris as the water passes through. The nets can be detached and removed from the structure in order to empty the debris.

The trash collectors are included in the TRWD routine floodway maintenance program that is triggered into effect with a ½ inch storm event. After such an event, the trash collectors are visually inspected for

capacity and damage. The cleaning schedule for the nets is dictated by the frequency of storms.

VII. PROPOSED DISCHARGE LIMITATIONS

The requirements in the draft permit are based on CWA §402(p)(3)(B), which provides that a permit for discharges from an MS4 must effectively prohibit the discharge of non-stormwater to the MS4. The permit must also provide controls to reduce pollutants in discharges from the MS4 to the MEP. Permit conditions include: BMPs; control techniques; system, design, and engineering methods; and other appropriate conditions.

A. SWMP

- Existing SWMP Requirements. The draft permit includes a series of BMPs in the form of a comprehensive SWMP rather than numeric effluent limitations. The details of the existing SWMP are discussed above in Section VI.B. of this fact sheet.
- 2. Proposed SWMP Requirements. The draft permit continues the existing requirements reorganized for clarity. The draft permit also continues requirements from the TPDES general permit for small MS4s (TXR040000), which is based on the Federal Phase II MS4 (40 CFR § 122.34). A compliance period of one year is established for each new permit condition to allow the permittees time to revise their SWMP and adopt new regulations and procedures to comply with the added requirements. The SWMP requirements require the permittees to:
 - a. Continue to update the Storm Sewer System Map. To address the mapping requirements for the Phase II MS4 MCM related to Illicit Discharge Detection and Elimination from the federal Phase II rule, 40 CFR §122.34(b)(3)(ii)(A), the draft permit requires the permittees to:
 - i. revise the MS4 map to include the location of all outfalls, the names and locations of all waters of the U.S. that receive discharges from the outfalls, and any additional information needed by the permittees to implement its SWMP;
 - ii. develop procedures to map all new outfalls; and
 - iii. evaluate all existing areas of the MS4 to add any outfalls that are currently not included in the MS4 map, to the extent practicable.

Based on the SWMP and annual reports (see Section VI.B.3.i. of this factsheet), it is clear that the City is already developing its Storm Sewer Map; therefore, the draft permit does not include any additional compliance for this requirement.

b. Develop a list of priority areas likely to have illicit discharges. Continue to evaluate and update the list each year.

- c. Continue the requirement to expand regulations for Post-construction Stormwater Management in New Development and Redevelopment. To address the provisions related to post-construction site runoff management in new development and redevelopment from the Federal Phase II rule [40 CFR §122.34(b)(5)(i) and (ii)] the draft permit requires the permittees to develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in the disturbance of one or more acres, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. Specifically, the permittees must:
 - i. develop and implement strategies that include a combination of structural and nonstructural BMPs appropriate for the community;
 - ii. use an ordinance or other regulatory mechanism to address postconstruction runoff from post-construction, new development, and redevelopment projects; and
 - iii. ensure adequate long-term operation and maintenance of BMPs.
- d. Continue to implement the updated Construction Site Runoff Program. To address the construction site runoff control provisions in the Federal Phase II rule [40 CFR §§122.34(b)(4)(i) and (ii)], the permittees must ensure that the existing construction program:
 - i. regulates sites that will disturb greater than or equal to one acre of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in the disturbance of one or more acres, that discharge into the MS4;
 - ii. addresses construction waste;
 - iii. includes plan review that takes into account water quality impacts;
 and
 - iv. establishes procedures to receive and consider information submitted by the public concerning construction activities.

Based on the SWMP and annual reports (see Part VI.B.6. of this fact sheet), it is clear that the City is already implementing its construction program to include these smaller sites; therefore, the draft permit does not include an additional compliance period for this element.

e. Continue the requirement to develop and implement a Good-Housekeeping Program for Municipal Operations. To address the pollution prevention and good housekeeping requirements for municipal operations in the Federal Phase II rule [40 CFR §122.34(b)(6)(i)], the

draft permit requires the permittees to implement a program that addresses all municipal operations within the MS4 and that includes good housekeeping and BMPs as well as training. For example, the draft permit includes a requirement to reduce the discharge of pollutants to the MEP from road repair, equipment yards, material storage facilities, and maintenance facilities.

- f. Continue to implement the updated Public Education and Outreach Component. To address the public involvement and participation program requirement in the Federal Phase II rule [40 CFR §122.34(b)(2)(i)], the permittees must continue to develop and implement a public involvement and participation program. Additionally, the existing public education program must be revised, if needed, to address specific entities (for example, residents and visitors) and to document activities conducted and materials used.
- 3. Combined Requirements -- Eight Minimum Control Measures (MCMs).

The draft permit SWMP contains the following eight program elements, or MCMs, which combine the existing requirements and the Phase II requirements listed in item 2 above:

- a. MS4 Maintenance Activities;
- b. Post-construction Stormwater Control Measures;
- c. Illicit Discharges Detection and Elimination;
- d. Pollution Prevention and Good Housekeeping for Municipal Operations;
- e. Industrial and High Risk Runoff;
- f. Construction Site Runoff;
- g. Public Education, Outreach Involvement and Participation; and
- h. Monitoring, Evaluating and Reporting.

The SWMP must describe a program or plan of compliance with Impaired Water Bodies and TMDL requirements, as provided in Part II, Section C. 2 a. and b. of the permit and any applicable TMDL I-Plans.

B. Monitoring Requirements

- 1. Storm Event Discharge Monitoring. The draft permit continues the existing requirement for the permittees to select and complete one of the three monitoring options listed below; each option is further described in Part VIII, Section D.2.e of this fact sheet. The headings of each of the sampling options have been updated in the draft permit, as have the general headings for the monitoring section.
 - a. Regional Wet Weather Characterization Program (Option 1): The permittees may participate in the TCEQ approved RWWCP discussed in this section and in more detail in Part VI, Section B.8. of this fact sheet.

The primary goal of the RWWCP is to obtain baseline data on receiving streams in the Dallas-Fort Worth (DFW) Metroplex for use in determining long-term water quality trends. This goal was generally achieved in the first two permit terms, and the final analysis indicated that more data was needed to establish actual trends. During the third permit term assessing the biological integrity of the streams was deemed fundamental to assess the impact of urban runoff on receiving stream quality. The Regional Stormwater Monitoring Partners of North Central Texas (regional partners) seek to continue documenting water quality improvements resulting from BMP effectiveness as they have over the last three permit terms. The regional partners propose continuing with the RWWCP because it has allowed for coordinated and comprehensive water quality sampling; sound and reliable data collection; greater cost effectiveness; and a true assessment of the regional impact on stream water quality.

For this upcoming permit term, the regional partners, except Texas Department of Transportation that was issued a separate statewide MS4 permit in November 2016 have agreed to continue their regional partnership to work cooperatively through the NCTCOG. On October 11, 2016, the NCTCOG submitted a proposal to revise the RWWCP for this next permit term for all of the MS4s included in the RWWCP, and on June 12, 2017 TCEQ received the final revised RWWCP. The revised RWWCP was approved by TCEQ on June 20, 2017.

The revised sampling plan requires the regional partners to effectively monitor at least half of each regional partner's jurisdictional area by the end of the permit term. As in the previous terms, the RWWCP requires the regional partners to continue in-stream watershed monitoring. The RWWCP's revised sampling plan requires each location to be sampled for at least two years which will yield greater statistical robustness of the data.

The primary goal of the RWWCP during this permit term is to continue the assessment of urban impact on receiving stream water quality and to document any improvement presumably resulting from local BMP implementation. Many of the watersheds that were studied in the third term were classified as high priorities to be studied again, if monitoring data showed stream degradation and water bodies had a TMDL. The data collected during this permit term will build upon the set of regional data needed from each site for meaningful trend analysis.

The approved RWWCP also includes a more comprehensive biomonitoring component. Since assessing the impact of urban runoff on receiving stream quality is a primary focus of this program, assessing the biological integrity of the streams is fundamental. The sampling plan requires that the regional partners sample and analyze 26 watersheds for the pollutants described in this section below. The sampling plan requires the regional partners to bio-assess 13 watersheds. The sampling plan

requires substantial overlap between the watersheds bio-assayed and the watersheds monitored for pollutants.

A map with each entity's selected watersheds was provided in the revised RWWCP. The specific location of each sampling site will be determined prior to each sampling year and will be submitted in each prior year's annual regional monitoring report. Most of the municipal entities were able to achieve 50% coverage with only two watersheds; however, due to the size of their jurisdictional area, the City of Dallas selected eight watersheds and the City of Fort Worth selected six watersheds to monitor. Jurisdictional coverage was not considered in the selection of the transportation agency watersheds.

The role of the NCTCOG in the regional monitoring program is to coordinate the overall program, obtain consultant assistance on behalf of the regional partners, assist the regional partners in site selection and the development of the sampling protocol; collect and summarize the data; and generate and deliver annual compliance reports.

The RWWCP requires the regional partners to begin watershed monitoring on January 1st of the year following the issuance of the first renewed permit, which will be before the rest of the partners' permits are renewed. TCEQ recognizes that because of the existing staggered permit expiration dates among the participants, it is likely that permit renewal dates will also be staggered. TCEQ recognizes that the sampling under the plan may begin before all permit renewals are issued; and will take into account the monitoring that an entity in the RWWCP contributes, even if the samples were taken before the entity's permit was renewed. TCEQ will give the permittees credit for that effort in the permit renewal. Entities will monitor according to the most recent TCEQ approved CTCOG Regional Monitoring program.

The RWWCP provides a detailed breakdown of the number and frequency of each partner's proposed sampling activities. The regional partners propose to continue a sampling plan that will effectively monitor at least 50% of their jurisdictional area by the end of the fourth permit term.

The Cities of Garland and Mesquite along with the North Texas Transportation Authority (NTTA) will be monitoring two watersheds for the entire permit term. The Cities of Arlington, Plano, and Irving will be monitoring three watersheds during the permit term, and will be monitoring two of the watersheds for two years, and then the third watershed for the other two years. The City of Dallas will sample at least five watersheds to achieve 50 % area coverage and has opted to chemically sample four watersheds and to bioassess four additional watersheds with only one watershed having both chemical sampling and bioassessment occurring in the same watershed.

The City of Fort Worth will sample six watersheds to achieve 50 % area coverage. The city intends to bioassess all six watersheds at two locations twice a year during each year of the permit term. For chemical sampling, the City intends to collect in-stream samples at two sites within two watersheds each year. The city will continue monitoring the top four most biologically impaired watersheds in the remaining two years of the permit term.

Under the revised RWWCP the permittee is required to collect and analyze samples for the following parameters:

Oil & grease; pH; E.coli;Total dissolved solids; Total suspended solids: Biochemical oxygen demand; Chemical oxygen demand; Total nitrogen; Dissolved phosphorus; Total phosphorus; Atrazine; Total arsenic: Total chromium: Total copper; Total lead; Total zinc; Ammonia nitrogen; Nitrate nitrogen; and Orthophosphate.

- b. Representative Monitoring (Option 2): As an alternative to the RWWCP option described in paragraph a above, the permittees may monitor storm sewer discharges at the four outfalls listed in Part IV, Section A.2.e. of the permit for the pollutants listed in Part VIII, Section D.2.e.(i)(b) of this fact sheet at a frequency of once per season.
- c. Rapid Bioassessment Monitoring (Option 3): As an additional alternative to a or b above, the permittees may develop and implement a representative rapid bioassessment program in accordance with Part IV, Section A.2 of the permit.
- 2. Floatables Monitoring: As described in Part IV, Section B of the permit, the permittees are required to conduct monitoring for floatable material discharging from the MS4.

C. Roles and Responsibilities

The draft permit requires the permittees to describe the roles and responsibilities of

each entity applying for the permit to ensure effective coordination. The permittees have entered into an interlocal agreement which describes how each entity will implement the SWMP and monitoring program. Each permittee will implement its individual SWMP on the portion of the system within its jurisdiction. Both permittees are accountable for understanding their roles and responsibilities regarding permit conditions.

D. Legal Authority

Each permittee is required to have the legal authority necessary to successfully enforce, implement, and complete the various activities described in the permit and SWMP. According to the permit application, each permittee has indicated that it has adequate legal authority to:

- 1. implement the permit;
- 2. control the contribution of pollutants to the MS4;
- 3. control the quality of stormwater from industrial sites contributing to the storm sewer system;
- 4. prohibit illicit discharges to the storm sewer system;
- 5. control spills, dumping, or improper disposal to the storm sewer system;
- 6. control the contribution of pollutants from one portion of the storm sewer system to the other;
- 7. require compliance with applicable ordinances through interlocal agreements; and
- 8. perform site inspections and monitoring.

E. Support Capabilities and Staffing

The draft permit requires the permittees to provide adequate support capabilities to implement its activities under the SWMP, which shall be demonstrated by the permittee's ability to fully implement the SWMP, monitoring programs, and other permit requirements. The draft permit does not require specific funding or staffing levels, which provides the permittees the ability and incentive to adopt the most efficient and cost-effective methods to comply with permit requirements.

F. Changes from the existing permit:

- 1. The SWMP requirements are continued to be organized so that similar program items are together.
- 2. Requirements listed in items 3-8 below are included in the SWMP based on the Federal Phase II MS4 rules in order to achieve the goals of the CWA related to the MEP standard. The draft permit provides a one-year compliance period,

except as noted.

- Part II of the permit was expanded to include a section on impaired 3. waterbodies and total maximum daily load (TMDL) requirements. A requirement was added to Part III, Section B.1. of the permit, which requires the permittee to modify its SWMP to describe a program or plan of compliance with Impaired Water Bodies and TMDL requirements, as provided in Part II. Section C. 2 a. of the permit and any applicable TMDL I-Plans. The MS4 is required to include in the SWMP controls targeting the pollutant(s) of concern along with controls required in the TMDL or Implementation Plan (I-Plan). For each targeted control, the SWMP must include a measurable goal (Part II, Section C.2.a.i. of the permit) and an implementation schedule (Part II, Section C.2.a.ii of the permit) describing BMPs to be implemented. A benchmark must be determined based on a Waste Load Allocation (WLA) for the MS4. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharge(s) from the MS4 to the MEP. The BMPs would need to be evaluated and modified as necessary within an adaptive management framework during the permit term. Adaptive management requires the permittees to assess and modify, as necessary, any or all existing BMPs to optimize reduction in stormwater pollutants through an iterative process. These benchmarks are not numeric effluent limitations or permit conditions, but are intended to be guidelines. The exceedance of a benchmark is not a permit violation and does not by itself indicate a violation of instream water quality standards. If the pollutant of concern is bacteria the SWMP must include focused BMPs targeting those sources. The SWMP and annual report must include information on implementing any focused controls and must include monitoring or assessment of progress in achieving benchmarks. If the permittees reduce applicable pollutant discharges for the pollutants listed in the TMDL to the MEP, this reduction is deemed to be adequate progress toward achieving assigned TMDL WLAs during this permit period
- 4. The existing provision requiring the permittees to include measurable goals, if feasible, for existing elements of the SWMP and to include measurable goals for new elements in the SWMP (Part III, Section A.2. of the draft permit). The permit was revised to require that new and existing elements include measurable goals and to include, as appropriate, the months and years when the permittees will undertake required actions, including interim milestones and the frequency of the action for each MCM described in the permit. (Part III, Section A.2. of the draft permit).
- 5. Part III.Section A.b.2.h.ii of the draft permit was revised to requires that samples taken under the Wet Weather Screening Program to confirm a particular illicit discharge connection of improper disposal practice, must conform to requirement of Part V.B.2. of the draft permit "Test Procedures."
- 6. Part III, Section B.2.c.xiii.A) of the draft permit requiring the MS4 mapping of all outfalls was revised to remove the compliance schedule.

- 7. Part III, Section B.2.d.i.B requiring the permittees to implement a pollution prevention and good housekeeping program for municipal operations was revised by removing the compliance schedule.
- 8. A new requirement, to develop procedures for site planning which incorporates consideration of potential water quality impacts and procedures to identify priorities for inspecting sites, was added to the Construction Site Stormwater Runoff program.
- 9. Part III, Section B.2.g.i. of the draft permit was revised to delete the one-year compliance schedule to implement the Public Education and Outreach section of the SWMP.
- 10. Part III, Section B.2.g.ii of the draft permit was revised to remove the one-year compliance schedule to complete development of the Public Involvement and Participation Program.
- 11. Part III, Section B.2.b. of the draft permit was revised to remove the one-year compliance schedule in the development and redevelopment program requirement.
- 12. The annual report requirement is updated to require reporting for compliance related to discharges to impaired waters and total maximum daily loads (Part II, Section C.2. of the draft permit).
- 13. The draft permit adds a requirement for the permittees to develop a list of priority areas likely to have illicit discharges within one year from the date of permit issuance. The permittees shall continue to evaluate and update this list each year and report the results in the annual report. (Part III, Section B.2.c.xi. of the draft permit).
- 14. In previous permit terms, the permittees shared authorization to discharge via the MS4 with the Texas Department of Transportation (TxDOT). On March 18, 2013, TxDOT applied for a statewide individual permit and is no longer a copermittee to be authorized under this draft permit. The statewide TPDES TxDOT MS4 permit WQ0005011000 was issued on November 30, 2016.
- 15. E-reporting requirements for monitoring results. Effective December 21, 2016, monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Permittees that are issued an electronic reporting waiver shall submit analytical results to the TCEQ Enforcement Division (MC-224) on an approved discharge monitoring report (DMR) form (EPA No. 3320-1). Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in the draft permit. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.
- 16. E-reporting requirements for annual reports. Effective September 1, 2020, annual reports must be submitted online using the online electronic reporting

system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

- 17. The definition for stormwater discharges associated with industrial activity in Part V, Section A.20. was revised to contain the whole title of the TPDES General Permit No. TXR050000 Industrial Stormwater Multi-Sector General Permit (MSGP).
- 18. The definition for Waters of the U.S. was revised by removing the reference to the definition of cooling ponds, located in 40 CFR §423.11(m). The definition currently located in 40 CFR §423.11(m) is for coal pile runoff.

VIII. <u>DRAFT PERMIT RATIONALE</u>

The following section sets forth the statutory and regulatory requirements considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific discharge limitations and conditions, including a citation to the applicable effluent limitation guidelines and water quality standards.

A. REASON FOR PERMIT ISSUANCE

The applicants have applied to the TCEQ for a renewal of TPDES Permit No. WQ0004350000, which authorizes stormwater point source discharges to surface water in the state from the City of Fort Worth MS4.

B. WATER QUALITY SUMMARY

1. Discharge Information

The discharge routes are via the MS4 to various ditches and tributaries that eventually reach West Fork Trinity River Below Lake Worth, Lake Worth, West Fork Trinity River Below Eagle Mountain Reservoir, Eagle Mountain Reservoir, Grapevine Lake, Lake Arlington, Clear Fork Trinity River Below Benbrook Lake, Benbrook Lake, and Lower West Fork Trinity River, Segment Nos. 0806, 0807, 0808, 0809, 0826, 0828, 0829, 0830, and 0841 of the Trinity River Basin. The receiving water uses are described in Part IV of this fact sheet. Effluent limits or conditions established in the draft permit are in compliance with state water quality standards and the applicable water quality management plan. The effluent limits and conditions in the draft permit will maintain and protect the existing instream uses.

Additional discussion of the water quality aspects of the draft permit can be found at Part VIII, Section D of this fact sheet.

2. Endangered/Threatened Species

There is no priority watershed of critical concern with respect to endangered and threatened species in Segment Nos. 0806, 0807, 0808, 0809, 0826, 0828, 0829, 0830, and 0841 in Tarrant, Denton, Parker, Wise, and Johnson Counties. Therefore, no endangered or threatened aquatic or aquatic dependent species

(including proposed species) occur in this area. This determination was made by referencing Appendix A of the U.S. Fish and Wildlife Service biological opinion, dated September 14, 1998, and the October 21, 1998 update, on the State of Texas authorization of the Texas Pollutant Discharge Elimination System.

3. Impaired Surface Waters

Segment Nos. 0806, 0807, and 0841 are currently listed on the State's inventory of impaired and threatened waters (the 2014 Clean Water Act Section 303(d) list).

PCBs, aldrin, dieldrin, and dioxin have been identified as a sources of impairment for the listed segments.

Issuance of this permit should not have an adverse effect on the listed receiving waters, as it does not authorize the discharge of wastewater that could be a source of the listed impairment. The MS4 could, however, serve as a conduit for illicit sources of pollutants to the receiving waters. Additionally, the MS4 could be a conduit for waste from pets, recreational livestock, and wild animals to water in the state, which may contribute to water quality problems. The draft permit requires continuous improvement of stormwater discharges from the MS4 through the development and implementation of a SWMP. Elements of the SWMP that could result in the reduction or elimination of these sources include the following: (1) MS4 Maintenance Activities, (2) Post—Construction Control Measures, (3) Illicit Discharges Detection and Elimination, (4) Pollution Prevention/Good Housekeeping for Municipal Operations, (5) Industrial & High Risk Runoff, (6) Construction Site Runoff, (7) Public Education and Outreach/Public Involvement and Participation, and (8) Monitoring, Evaluation and Reporting.

This permit may be amended to include requirements and conditions, specific to these discharges and to the pollutants of concern, consistent with an approved Total Maximum Daily Load (TMDL) and the TMDL Implementation Plan (I-Plan).

4. Total Maximum Daily Loads (TMDLs)

Approved TMDLs is this watershed include:

Eleven Total Maximum Daily Loads for Legacy Pollutants in Streams and Reservoirs in Fort Worth Segments: 0806, 0806A, 0806B, 0829, and 0829A

One Total Maximum Daily Load for Polychlorinated Biphenyls (PCBs) in Fish Tissue in Lake Worth and One Addendum Segments: 0807 and 0808

Nine Total Maximum Daily Loads for Legacy Pollutants in Streams and a Reservoir in Dallas and Tarrant Counties. Segments: 0805, 0841, and 0841A

Thirteen Total Maximum Daily Loads for Indicator Bacteria in the Lower West Fork Trinity River Watershed. Segments: 0841, 0841B, 0841C, 0841E, 0841G, 0841H, 0841J, 0841L, 0841M, 0841R, 0841T, and 0841U

Proceeding with the activities listed in the permit at this time supports the statutory and regulatory requirements for MS4 permits to (1) reduce the discharge of pollutants to the MEP practicable, (2) effectively prohibit the discharge of non-stormwater into the MS4, (3) ensure discharges do not cause or contribute to violations of water quality standards, and, in the future as they are completed, (4) comply with the wasteload allocations and assumptions of any applicable TMDL. Consistent with EPA policy regarding water quality and TMDL controls in MS4 permits, BMPs are still expected to be the primary control mechanism in the permit.

Additional requirements for TMDL watersheds may be described in an Implementation Plan and phased into the SWMP ad deemed appropriate.

C. TECHNOLOGY-BASED DISCHARGE LIMITATIONS/CONDITIONS

1. General Comments:

Permits issued to MS4s are specifically required by CWA § 402(p)(3)(B) to "include a requirement to effectively prohibit non-stormwater discharges into the storm sewers." However, 40 CFR § 122.26(d)(2)(iv)(B)(1) does allow the permittees to accept certain non-stormwater discharges where they have not been identified as significant sources of pollutants. Any discharge subject to its own NPDES or TPDES permit is not subject to the prohibition on non-stormwater and may be accepted to the MS4 and subsequently discharged.

TCEQ has determined that the requirements of this permit will meet the MEP standard required in the CWA while being consistent with the Federal Phase I MS4 regulations at 40 CFR § 122.26 and incorporating provisions of the Federal Phase II MS4 regulations at 40 CFR § 122.34.

2. Specific Recommendations:

No numeric effluent limits are included in the draft permit. As discussed in Part VII of this fact sheet, the permit includes a series of BMPs, in the form of a comprehensive SWMP, in lieu of numeric limitations.

The draft permit requires that the SWMP meets the MEP standard. The Executive Director has determined that if a permittee implements the SWMP as detailed in the application and implements the revisions called for in the draft permit, it should meet the MEP standard. Because the application of the MEP standard is iterative, this permit contains provisions that allow the permittees or the TCEQ to update the SWMP as necessary to meet the MEP standard.

The permit also requires that the permittees choose and complete one of the three monitoring options listed in Part VIII, Section D.2.e of this fact sheet and in Part IV, Section A of the draft permit. The monitoring requirements are technology-based and are consistent with federal rules related to discharges from MS4s.

Two types of monitoring are required by the permit: completion of one of the

monitoring options listed in Part VII, Section B.1 of this fact sheet and in Part IV, Section A of the draft permit, and floatables monitoring. The monitoring of the discharge of representative outfalls during actual storm events will provide information on the quality of runoff from the MS4, a basis for estimating annual pollutant loads, and a mechanism to evaluate reductions in pollutants discharged from the MS4. The outfalls chosen for sampling for this MS4 provide information on a variety of land uses, impervious covers, and acreages.

Discharge monitoring requirements (see Part VII, Section B.1. and Part VIII, Section D.2.e of this fact sheet) are required for the permittees to:

- a. characterize the quality of the discharges from the MS4;
- b. monitor the Ms4 to provide the data necessary to assess the effectiveness and adequacy of SWMP control measures;
- c. estimate annual cumulative pollutant loadings from the MS4;
- d. estimate event mean concentrations and seasonal pollutants in discharges from major outfalls or sub-watersheds;
- e. identify and prioritize portions of the MS4 requiring additional controls; and
- f. identify water quality improvements, or degradations, and progress toward any measurable goals or measured reductions in pollutants.

The permit requires that the permittees conduct any additional monitoring necessary to accurately characterize the quality and quantity of pollutants discharged from the MS4.

This data will be used in future permitting decisions and as evidence of pollutant reductions. If monitoring during the proposed permit term proves insufficient to show evidence of pollutant reductions, numeric effluent limitations may be required in the future.

Floatables monitoring will indicate trends in water quality issues and the success of the SWMP in reducing and eliminating floatables discharged from the MS4.

As discussed in Part VI, Section B.1-8 of this fact sheet, the permittees developed and implemented the required SWMP, and continues to revise the SWMP as necessary.

D. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments:

The Texas Surface Water Quality Standards (TSWQS) found at 30 TAC Chapter 307 state that "[s]urface waters must not be toxic to man from ingestion of

water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life." The methodology outlined in the "Procedures to Implement the Texas Surface Water Quality Standards" is designed to ensure compliance with 30 TAC Chapter 307. Specifically, the methodology is designed to ensure that no source will be allowed to discharge any wastewater which: (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical state water quality standard; (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation that threatens human health.

TPDES permits contain technology-based discharge limits or conditions reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based discharge limits or conditions may be incorporated in future permit actions. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other toxicity databases to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

In general, TPDES stormwater permits do not contain water quality-based effluent limits (WQBELs); rather, they emphasize requirements that permittees must implement to prevent or effectively reduce the exposure of stormwater to pollution. As stated in 30 TAC § 307.8(e), "Pollution in stormwater must not impair existing or designated uses. Controls on the quality of stormwater discharges must be based on best management practices, technology-based limits, or both in combination with instream monitoring to assess standards attainment and to determine if additional controls on stormwater quality are needed. The standards implementation procedures as amended describe how water quality standards are applied to Texas Pollutant Discharge Elimination System stormwater discharges. The evaluation of instream monitoring data for standards attainment includes the effects of stormwater, as described in 30 TAC §307.9." The procedures used are based on those described in the EPA's Interim Permitting Approach guidance document titled "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits." Implemented properly, the requirements in this permit will provide substantial compliance with the TSWQS as specified in 30 TAC §§ 307.1.-307.10.

2. Specific Recommendations:

As stated above, no numeric effluent limitations are proposed at this time. The following narrative provisions are required as part of the permit to comply with 30 TAC Chapter 307.

a. No discharge of toxics from the MS4 in toxic amounts. 30 TAC § 307.4(d) requires that "[s]urface waters must not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life."

- b. No discharge of pollutants in quantities that would cause a violation of State water quality standards.
- c. No degradation or loss of designated uses of receiving waters as a result of stormwater discharges from the MS4 (unless authorized in accordance with the Antidegradation Policy).
- d. Area-Specific Requirements: None.
- e. Discharge Monitoring Requirements:
 - i. Storm Event Discharge Monitoring Program. The permittee(s) must comply with option (a), (b), or (c), below:
 - (a) Regional Wet Weather Characterization Option: Instream monitoring offers the ability to assess the overall quality of the receiving water in relation to the quality of stormwater discharges from the MS4. The NCTCOG Regional Monitoring program, which was first approved by the TCEQ in 2003 uses instream sampling to establish baseline data on receiving streams to determine long-term water quality trends during stormwater run-off conditions. Participants in the TCEQ approved program must follow the most recently TCEQ approved monitoring program. Additional discussion of this permit option is described in Part VII, Section B.1.a. of this fact sheet
 - (b) Representative Storm Event Monitoring Option: The permittees may instead monitor for the parameters listed below at outfalls Outfall 001, Outfall 002, Outfall 003, and Outfall 004. Sampling of the following parameters is required at a frequency of once per season as described in the draft permit:

BOD5
COD
Oil and Grease
TSS
TDS
Total Nitrogen
Total Kjeldahl Nitrogen
Nitrate + Nitrite
Total Arsenic
Total Phosphorus
Dissolved Phosphorus
Total Cadmium
Total Chromium
Total Copper
Total Lead

Total Zinc
E. coli
Fecal streptococcus
pH
Hardness (as CaCO₃)
Temperature
Atrazine

These parameters are consistent with federal regulations at 40 CFR § 122.26(d)(2)(iii) to provide estimates of pollutant loadings for each major outfall.

No changes in parameters were included in this permit renewal.

Representative Rapid Bioassessment Monitoring Option: Biological monitoring techniques offer the ability to indirectly assess the quality of stormwater discharges from the municipal separate storm sewer systems by assessing the "health" of the receiving water. Rapid bioassessment protocols evaluate the number, diversity, and relative "pollution tolerance" of aquatic species in the receiving water bodies (e.g. streams, rivers, lakes, estuaries, etc.). Either fish or benthic organisms (bottom-dwelling insects, etc. that serve as food supply for higher organisms) can be studied. Comparing the types and numbers of organisms collected from water bodies receiving discharges from the MS4 to those collected from a "reference site" relatively unimpacted by urban runoff provides an indication of how degraded the water body is. For example, a healthy stream would typically have greater species diversification and a higher number of species that require clean water to survive and reproduce. A degraded stream would have relatively fewer species and a larger proportion of species that are tolerant of pollution.

While rapid bioassessments do not directly measure the quality of stormwater discharges, they can be an important (and cost effective) tool in tracking trends in water quality. The permittees will be given the option of replacing a portion of the pollutant-specific monitoring required by the permit with a rapid bioassessment monitoring program. The program must include an appropriate bioassessment monitoring protocol (e.g., based on EPA published protocol), and the permittees shall provide written notification to the TCEQ's Stormwater and Pretreatment Team at least 14 days prior to commencing a rapid bioassessment monitoring program. Upon approval by the TCEQ, the permittees may replace or reduce the frequency of pollutant-specific monitoring with rapid bioassessment of at least two receiving waters plus a reference site. Should a permittee elect to use the rapid

bioassessment option, pollutant-specific monitoring of actual stormwater discharges will still be required during Years One and Four; or the permittees choosing to perform pollutant-specific monitoring according to the *Regional Wet Weather Characterization Program (RWWCP)* described above in Part VII.D.2.i.(a) and in Part IV, Section A.1 of the permit will be required to sample each watershed, at least once per permit term.

ii. Floatables Monitoring: The permittees must perform floatable surveys to investigate trends in water quality issues related to manmade debris and floatables. The comparison of yearly survey results will allow the permittees and the TCEQ to assess the impact of the SWMP elements as they relate to the reduction and elimination of floatables discharged from the MS4. A minimum of two monitoring locations for removal of floatable material in discharges to or from the MS4 must be established within the MS4 and estimates of weight, volume, etc. must be reported annually.

IX. PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application, and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice must also be posted in a public place. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment, and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit, raised during the public comment period. The Chief Clerk then mails the Executive Director's Response to Comments and Final Decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a

contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's Response to Comments and Final Decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Hanne L. Nielsen at (512) 239-6524.

X. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

A. PERMITS

TPDES Permit No. WQ0004350000 (EPA I.D. No. TXS000901) issued and effective on July 29, 2011 with an expiration date of July 29, 2016.

B. APPLICATION

"TPDES Application for Permit - Medium/Large Municipal Separate Storm Sewer Systems." Form 20214, received on February 1, 2016.

C. 40 CFR CITATIONS

40 CFR Parts 122 and 124.

D. LETTERS/MEMORANDA/RECORDS OF COMMUNICATION

Letter dated July 31, 2015 from Deidre Shepphard, TCEQ to City of Fort Worth. Letter dated January 27, 2016 to Applications Review and Processing Team TCEQ from Cody Whittenburg, City of Fort Worth. Letter dated February 22, 2016 from Deidre Shepphard, TCEQ to Cody Whittenburg, City of Fort Worth.

E-mail dated June 2, 2016 from Hanne L. Nielsen, TCEQ to Cathy Matthews, City of Fort Worth. E-mail dated June 16, 2016 from Cathy Matthews, City of Fort Worth to Hanne L. Nielsen, (TCEQ). Email dated September 6, 2016 from Hanne L. Nielsen, TCEQ to Cathy Matthews, City of Fort Worth. Email dated September 7, 2017 from

Cathy Matthews, City of Fort Worth to Hanne L. Nielsen, TCEQ.

TCEQ Interoffice Memorandum dated March 3, 2016, from the TCEQ's Water Quality Standards Implementation Team (Jeff Paull) to the Stormwater and Pretreatment Team.

TCEQ Interoffice Memorandum dated March 23, 2016from the TCEQ's Total Maximum Daily Load Team (Chris Loft) to the Stormwater and Pretreatment Team (Rebecca L. Villalba).

The Annual Report for prepared by North Central Texas Council of Governments; prepared on February 2015.

EPA inspection report TXS000901 City of Fort Worth, July 26, 2012.

E. MISCELLANEOUS

Quality Criteria for Water (1986), EPA 440/5-86-001, 5/1/86.

The State of Texas Water Quality Inventory, 13th Edition, Publication No. SFR-50, Texas Commission on Environmental Quality, December 1996.

Texas Surface Water Quality Standards - 30 TAC §§307.1-307.10, effective March 6, 2014.

Texas Surface Water Quality Standards - 30 TAC $\S\S307.1$ -307.10, effective July 22, 2010, as approved by EPA Region 6.

Texas Surface Water Quality Standards - 30 TAC §§307.1-307.10, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 Standards not approved by EPA Region 6.

Procedures to Implement the Texas Surface Water Quality Standards (IP), TCEQ, June 2010, as approved by EPA Region 6.

Procedures to Implement the Texas Surface Water Quality Standards, TCEQ, January 2003, for portions of the 2010 IP not approved by EPA Region 6.

MS4 Permit Improvement Guide, U.S. EPA, Office of Water, Office of Wastewater Management, Water Permits Division, EPA 833-R-10-001 (April 2010).

2014 Texas 303(d) List, Texas Commission on Environmental Quality, June 3, 2015 (approved by EPA on November 19, 2015).

Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits, EPA-833-D-96-001 (September 1996).

Eleven Total Maximum Daily Loads for Legacy Pollutants in Streams and Reservoirs in Fort Worth Segments: 0806, 0806A, 0806B, 0829, and 0829A

One Total Maximum Daily Load for Polychlorinated Biphenyls (PCBs) in Fish Tissue

in Lake Worth and One Addendum Segments: 0807 and 0808

Nine Total Maximum Daily Loads for Legacy Pollutants in Streams and a Reservoir in Dallas and Tarrant Counties. Segments: 0805, 0841, and 0841A

Thirteen Total Maximum Daily Loads for Indicator Bacteria in the Lower West Fork Trinity River Watershed. Segments: 0841, 0841B, 0841E, 0841E, 0841G, 0841H, 0841I, 0841I, 0841I, 0841I, 0841I, 0841I

Analysis of the Dallas-Fort Worth Regional NPDES Stormwater Data Base and Data Collection Network, United States Geological Survey, June 7, 1994.

The North Central Texas Regional Wet Weather Characterization Plan Proposal for the Fourth Permit Term, submitted to the TCEQ on October 11, 2016 and subsequent revisions on May 26, 2017, June 8, 2017 and June 12, 2017 (approved by letter dated June 30, 2017).